

The International Bryozoology Association

P. D. TAYLOR

Abstract: Founded in 1965, the International Bryozoology Association (IBA) exists to encourage research on bryozoans, both fossil and living, and to provide a forum for the exchange of ideas. The latter is accomplished mainly through international conferences which are held once every three years. Thirteen such conferences have now been held, each attended by roughly one-third of the total IBA membership which has fluctuated over the years between about 175 and 275 members. Conference proceedings are published as a volume of collected papers. The IBA conference volumes are key works for anyone interested in bryozoans and give a flavour of changing trends in bryozoan research through time. Equally valuable is the annual newsletter of the IBA, first produced in 1980, containing a bibliography of papers published on bryozoans during the past year, items of news and a list of members. More recently, a website has been constructed which includes links to the home pages of IBA members.

Key words: Bryozoa, science communication, international conferences, trends in research.

Introduction

Communication is a vital part of science. No scientist works in isolation – all are influenced by the findings of others, and all wish to make their own findings known to others. Collaboration between scientists has increased as the breadth of scientific knowledge has expanded beyond the compass of any single individual, and as larger scientific questions have been addressed that necessitate teams of scientists working together. Scientific societies play key roles in communication and therefore in facilitating science. Some societies are broad in scope, covering, for example, all aspects of biology or geology. Others bring together specialists studying a narrower field. The International Bryozoology Association (IBA) falls within the second group and is the only international society designed specifically for bryozoan specialists.

Bryozoans are a fascinating phylum of aquatic invertebrates, little known to non-specialists but nevertheless abundant and diverse at the present day and in the fossil record. Their public profile is low, partly because they are consistently mistaken for corals, sponges or plants by non-specialists, but also because most bryozoans have little or

no direct economic value – a notable exception is *Bugula neritina*, host organism for the bacterium *Endobugula sertula* that produces the anti-cancer agent bryostatin. The scarcity of bryozoan specialists in the world means that our knowledge of the biology and palaeontology of bryozoans lags behind that of comparable invertebrate phyla. Consequently, there is a particular need to facilitate communication between bryozoologists, many of whom are geographically isolated and work alone on bryozoans in their home institutions, as well as to promote bryozoology to non-specialists. It was with these objectives in mind that the IBA was founded forty years ago in Stockholm. This short paper describes the history of the IBA and how it currently sets about fulfilling its objectives.

History of the IBA

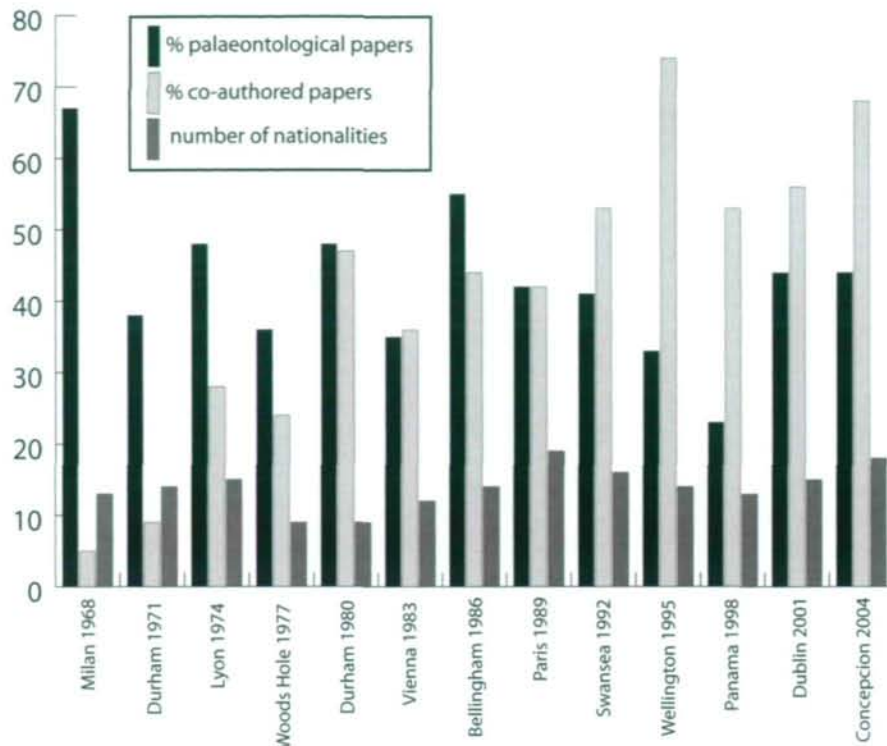
The first chairman of the IBA, Alan Cheetham, summarized the foundation and early history of the Association (CHEETHAM 2002). In May 1965 a group of sixteen bryozoologists met in Stockholm. They had been assembled there by Alan, then a visiting professor at Stockholm University, as a sort of 'think tank' to discuss topical issues in bryozoology. For example, could bryozoans



be used successfully in biostratigraphy, what are the ecological preferences of bryozoans, and what phylogenetic trends are evident in bryozoans? By the end of the meeting it had been resolved to form the IBA and a decision was taken to hold the first international conference in 1968. The next task was to assemble a list of as many scientists as possible who would might be interested in joining the fledgling IBA and participating in the 1968 conference which was to be hosted by Professor Enrico Annoscia at the headquarters of the Italian oil company AGIP in Milan. The internationalist ambitions of the IBA's founders were fulfilled, with scientists from 15 different nations among the 49 delegates attending the 1st International Conference of the IBA (Fig. 1a). As Alan Cheetham has pointed out, however, the political tensions in Czechoslovakia caused some depletion in numbers after the late withdrawal of delegates from the USSR.

Since the Milan conference, there have been a further 12 international conferences of the IBA, one every three years, the last held in Concepcion, Chile during 2004 (Fig. 1d). Seven of the conferences have been hosted in European cities, two in North America, and one each in Central America, South America and Australasia (Tab. 1). These conferences have been successful in bringing together bryozoologists from different countries who might otherwise never have had the opportunity to meet. They have also generated a series of conference proceedings volumes that are essential references works for all bryozoologists.

Fig. 1: Changing faces of the IBA. **a:** Group photograph taken during the 1st International Conference in Milan, 1968; The figures standing at the front, slightly right of centre, are Pat Cook, first Secretary of the IBA, and Alan Cheetham, first President of the IBA. **b:** Collecting Austrian Miocene bryozoans during the preconference field excursion of the 6th International Conference (Vienna, 1983). **c:** A minor set-back when the bus conveying participants in the postconference field excursion of the 11th International Conference (Panama, 1998) became stuck in the black sand of a Costa Rican beach. **d:** Group photograph taken during the 13th International Conference in Concepcion, 2004.



REGUANT (2002) undertook an analysis of the first twelve IBA conferences and their published proceedings. Participation in the conferences, where data was available, averaged 75, ranging from 49 (Milan) to 104 (Dublin). In all, thirty-eight nations were represented among the participants. As for the conference proceedings volumes, findings from a new dataset spanning the entire 13 conferences are summarized in Figure 2. The number of nationalities represented by single or first authors of coauthored papers has averaged 14, ranging from 9 to 19. There has been no sustained trend through time in this statistic which instead shows a fifteen year cyclicity, weak and unexplained, with highs in 1974, 1989 and 2004. More striking is an increase in the proportion of co-authored papers through time: fewer than 10 % of papers published in the 1968 and 1971 conference volumes were written by two or more authors, whereas more than 50 % of papers in each volume since the 1992 conference are coauthored. While this undoubtedly reflects a general trend in science for collaborative research, the IBA can certainly take credit for some of the collaborations. For those papers that can be categorized as either neontological or palaeontological (i.e. concerning recent and fossil bryozoans respectively), zoological papers

Fig. 2: Trends in the proportions of palaeontological papers and of co-authored papers, and in the number of first author nationalities, in the proceedings volumes of the IBA conferences from Milan 1968 to Concepcion 2004.

Tab. 1: The international conferences of the IBA (1968-2004), with bibliographical details of the proceedings volumes. Note that Wyse JACKSON (2002) has published a listing, alphabetically by author, of the papers published in the volumes up to and including the 12th conference volume.

Conference	Venue	Date	Proceedings volume
1 st	Milan, Italy	August 12-16, 1968	Annoscia E. 1968. Proceedings of the First International Conference on Bryozoa. — Atti della Società di Scienze Naturali del Museo Civico di Storia Naturale di Milano 108 .
2 nd	Durham, UK	6-16 September, 1971	Larwood G.P. 1973. Living and Fossil Bryozoa. Recent Advances in Research. — Academic Press, London and New York.
3 rd	Lyon, France	2-11 September, 1974	Pouyet S. 1975. Bryozoa 1974. Proceedings of the Third Conference. International Bryozoology Association. — Documents des Laboratoires de Géologie de la Faculté des Sciences de Lyon H.S. 3.
4 th	Woods Hole, USA	7-17 September, 1977	Larwood G.P. & M.B. Abbott 1979. Advances in Bryozoology. — Academic Press, London (Systematics Association, Special Volume No. 13).
5 th	Durham, UK	1-6 September, 1980	Larwood G.P. & C. Nielsen 1981. Recent and Fossil Bryozoa. — Olsen & Olsen, Fredensborg.
6 th	Vienna, Austria	18-23 July, 1983	Nielsen C. & G.P. Larwood 1985. Bryozoa: Ordovician to Recent. — Olsen & Olsen, Fredensborg.
7 th	Bellingham, USA	4-9 August, 1986	Ross J.R.P. 1987. Bryozoa: Present and Past. — Western Washington University Press, Bellingham.
8 th	Paris, France	17-22 August, 1989	Bigey F.P. 1991. Bryozoaires Actuels et Fossiles. — Bulletin de la Société Sciences Naturelles de la Ouest de France, Mémoire H.S. 1.
9 th	Swansea, UK	25 July-1 August, 1992	Hayward P.J., Ryland J.S. & P.D. Taylor 1994. Biology and Palaeobiology of Bryozoans. — Olsen & Olsen, Fredensborg.
10 th	Wellington, NZ	30 January-3 February 1995	Gordon D.P., Smith A.M. & J.A. Grant-Mackie, 1996. Bryozoans in Space and Time. — NIWA, Wellington.
11 th	Panama City, Panama	26-31 January 1998	Herrera Cubilla A. & J.B.C. Jackson 2000. 11th International Bryozoology Association Conference. — Smithsonian Tropical Research Institute, Balboa, Republic of Panama.
12 th	Dublin, Ireland	16-20 July, 2001	Wyse Jackson P.N., Buttler C.J. & M. Spencer-Jones 2002. Bryozoan Studies 2001. — A.A. Balkema Publishers, Liss.
13 th	Concepcion, Chile	12-16 January, 2004	Moyano H.I., Cancino J.M. & P.N. Wyse Jackson 2005. Bryozoan Studies 2004. — A.A. Balkema Publishers, Leiden.

have dominated all IBA conference volumes apart from 1968 and 1986, in one year (1998) comprising three-quarters of the papers.

An innovation came in 2001 when an historical session was convened at the end of the 12th International Conference in Dublin. This resulted in the publication of "Annals of Bryozoology" (WYSE JACKSON & SPENCER JONES 2002), the first in a projected series of books comprising papers on bryozoologists of the past and their collections.

British-based members of the IBA initiated a series of one-day meetings in 1998 to help fill in the gaps between international conferences. Four such Larwood Symposia, named for past IBA President Gilbert P. Larwood, have been held: Bristol (1998), Swansea (1999), London (2000) and Copenhagen (2002). Another is planned for 2005 in Aberystwyth.

Objectives and functioning of the IBA

As stated on the website <http://www.nhm.ac.uk/hosted_sites/iba/>, the objectives of the IBA are:

- to encourage research on Bryozoa and stimulate others to participate and co-operate through informal meetings and correspondence;
- to provide a forum for exchange of ideas;
- to establish a means and an opportunity for personal contact and interaction in aiming for better mutual understanding;
- to serve as a liaison among bryozoologists;
- to introduce new students to the workers in this field.

Anyone willing to contribute to these objectives is eligible for IBA membership. Current membership numbers 252 individuals according to the latest IBA newsletter ("BRYOZOA 2003"). These members are distributed across 42 countries. The largest number of members in a single country is 57, for the USA, followed by the UK with 33

members, Russia with 22 and Germany with 14. Eighteen countries have only a single IBA member.

Most of the work of the IBA falls on the shoulders of the Secretary and the Treasurer (formerly a combined post), as well as the local organizers of the conferences, all of whom do their work for the IBA on an entirely voluntary, unpaid basis. They are supported by a President, President-Elect, Conference Proceedings Facilitator and at least 8 additional council members. Presidents serve for three years and council members for six. Bureaucracy is kept to a minimum and the Association has very low running costs. Consequently membership fees are minimal. Of necessity in view of their wide geographical spread, council meetings take place only during the international conferences when there is also a business meeting open to the entire membership. The most important decision to be made at the business meeting is where to hold future international conferences. This is resolved 6 years in advance, two or more proposals usually being presented by prospective hosts and a vote taken by the attending members to choose the favoured option.

Members of the IBA have received an annual newsletter since 1980. This contains items of news, including conference announcements, a list of members with their postal and e-mail addresses, and a bibliography of the past year's publications on bryozoans. Edited by the IBA Secretary, the newsletter provides regular, annual contact with the IBA membership. This is particularly important in view of the long time gap between successive conferences – three-and-a-half years in instances when a conference held in the austral summer at a venue south of the equator is followed by one held during the northern hemisphere summer at a location north of the equator.

The high points of the IBA are undoubtedly the triennial international conferences which have already been mentioned (see above and Tab. 1). These furnish an unrivalled opportunity for bryozoologists from around the world to gather together for a week of intense discussions, lectures and poster displays. The atmosphere is unfailingly friendly and cooperative – very few

acrimonious rivalries exist in the underpopulated world of bryozoology. Conference format normally entails four days of lectures split by a mid-conference field excursion when the natural history and culture of the host region are sampled. There are also longer pre- and post-conference field excursions (Fig. 1b, c). These normally last for about a week and may involve substantial travel around the host country, with visits to marine stations, freshwater and geological sites, and places of general interest. For example, Darwin's residence, Down House, was visited during the 1992 Swansea post-conference field excursion. Valuable opportunities have been afforded during these field excursions for bryozoologists to collect fossil and living bryozoans for their own research (e.g. CADÉE 1982), and for incorporation into the reference collections held by their home institutions.

Summary

During the 40 years since its foundation, the International Bryozoology Association has been successful in furthering research into bryozoans through the fostering of cooperation between bryozoologists from different institutions and countries, and encouraging cross-fertilization between neontologists and palaeontologists. The centrepieces of the IBA's activities are the triennial international conferences. These very friendly gatherings are generally attended by about one-third of the full membership. The conference proceedings volumes have become a key part of the literature on bryozoans, eagerly awaited by established bryozoologists and essential reading for those new to bryozoology. Field excursions organized around the IBA conferences have allowed bryozoologists to see at first hand the geological and biological sites studied by their colleagues, to the benefit of all concerned. The annual newsletter edited and compiled by the IBA Secretary is a crucial element in maintaining regular contact with the membership. It is valuable as a source of information on forthcoming meetings and other news items, and lists members addresses and papers published on bryozoans during the past year. Much of this information is also now available on the Association's website.

The IBA continues to welcome new researchers studying bryozoans. Bryozoology offers just as many exciting challenges today as it did when the IBA was first formed forty years ago.

Acknowledgments: Emmy Wöss (Vienna) is thanked for inviting me to write this short paper, and Piotr Kuklinski (London) for commenting on a draft version. I also thank the entire IBA membership for their friendship and scientific guidance during my 30 years as a member, and for electing me as President for the period 2004-2007.

References

- CADÉE G.C. (1982): Notes on Bryozoa, 2. *Membraniporella gigas* n. sp., and some other additions to the British Coralline Crag bryozoan fauna. — Meded. Werkgr. Tert. Kwart. Geol. **19**(4): 127-140.
- CHEETHAM A.H. (2002): The founding and early history of the International Bryozoology Association, 1965-1974. — In: WYSE JACKSON P.N. & M.E. SPENCER JONES (Eds.): Annals of Bryozoology. Intern. Bryozool. Assoc., Dublin: 45-57.
- REGUANT S. (2002): Thirty four years of bryozoology: the I.B.A. International Conferences (1968-2001). — In: WYSE JACKSON P.N. & M.E. SPENCER JONES (Eds.): Annals of Bryozoology. Intern. Bryozool. Assoc., Dublin: 233-241.
- WYSE JACKSON P.N. (2002): Author index to the conference volumes (1-12) of the International Bryozoology Association (1968-2002). — In: WYSE JACKSON P.N., BUTTLER C.J. & M.E. SPENCER JONES (Eds.): Bryozoan Studies 2001. Balkema, Lisse: 379-394.
- WYSE JACKSON P.N. & M.E. SPENCER JONES (Eds.; 2002): Annals of Bryozoology. — Intern. Bryozool. Assoc., Dublin: i-viii + 1-382.

Address of author:
Dr. Paul D. TAYLOR
Department of Palaeontology
Natural History Museum
London SW7 5BD, UK
E-Mail: pd@nhm.ac.uk